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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,214	10/24/2001	Young-Hwan Yu	45571/DBP/H401	7845
23363	7590	12/04/2003		EXAMINER
CHRISTIE, PARKER & HALE, LLP 350 WEST COLORADO BOULEVARD SUITE 500 PASADENA, CA 91105				YOUN, TAE H
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/004,214	YU ET AL
Examiner	Art Unit	
Tae H Yoon	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### ***Office Action Summary***

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on \_\_\_\_\_.  
2a)  This action is FINAL.                    2b)  This action is non-final.  
3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-5 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-5 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

13)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a)  The translation of the foreign language provisional application has been received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_  
4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification and claims recites that the ethylene-propylene **block** copolymer consists of **70-100** wt.% of propylene polymer and **0-30** wt.% of ethylene-propylene copolymer. However, a copolymer consists of **100** wt.% of propylene polymer and **0** wt.% of ethylene-propylene copolymer cannot be a **block** copolymer, but a propylene homopolymer. Thus, applicant failed to describe said block copolymer adequately.

Also, applicant failed to describe the recited limit viscosity, melt index and viscosity adequately since neither concentration (such as 0.5 wt.%) in measuring said limit viscosity and viscosity (of polyolefinpolyol) and nor load (such as 2.16 or 21.6 kg) in measuring said melt index are disclosed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited phrase in (a) of claim 1 is confusing and since it is unclear whether a propylene homopolymer is claimed or not as the reason given above. The recited limit viscosity, viscosity (of polyolefinpolyol) and melt index are indefinite as the reason given above. Also, a recitation of ethylene- $\alpha$ -olefin rather than ethylene-a-olefin is needed in claim 1.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Moteki et al (US 4,409,345).

Moteki et al teach the instant composition in table 5 and EPR of said table is taught at col. 5, lines 28-34 which encompasses the instant ethylene-propylene copolymer (b) and (c) absent a particular  $\alpha$ -olefin. Various modified polypropylenes are taught at col. 5, lines 38-53. Thus, the instant invention lacks novelty.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as obvious over Moteki et al (US 4,409,345) and Taniguchi et al (US 5,567,759), Shinonaga et al (US 5,573,856) or Hirakawa et al (US 2002/0035191).

Claim 5 further recites talc having an average particle size smaller than 5  $\mu\text{m}$  over Moteki et al who teach employing talc having an average particle size smaller than 10  $\mu\text{m}$  at col. 4, lines 38-40 and in table 4. Taniguchi et al teach the use of talc having an average particle size of 0.2-5  $\mu\text{m}$  at col. 5, lines 56-58. Shinonaga et al (col. 4, lines 51-64 and table 1) teach talc having an average particle size of no more than 3  $\mu\text{m}$  and Hirakawa et al teach the use of talc having an average particle size of no more than 4  $\mu\text{m}$  in [0018].

It would have been obvious to one skilled in the art at the time of invention to utilize talc having an average particle size of less than 5  $\mu\text{m}$  of Taniguchi et al, Shinonaga et al or Hirakawa et al in Moteki et al since Moteki et al teach employing talc having an average particle size smaller than 10  $\mu\text{m}$  which encompasses the instant average particle size smaller than 5  $\mu\text{m}$  absent showing otherwise.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Asai et al (US 5,889,100).

Note that the ethylene-propylene copolymer (b) encompasses ethylene- $\alpha$ -olefin copolymer (c) absent a particular  $\alpha$ -olefin.

Asai et al teach the instant composition in abstract and tables 6-10.

Thus, the instant invention lacks novelty.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as obvious over Taniguchi et al (US 5,567,759).

Taniguchi et al teach a polypropylene composition comprising the instant (a), (b), (c) and (d) at col. 2, lines 28-44 and in examples. Polypropylene block copolymer (col. 3, lines 15-22), ethylene-propylene copolymer rubber (col. 4, lines 44-63), ethylene-butene-1 copolymer and talc (col. 5, line 29 to col. 6, line 19) are taught.

The instant invention further recites employing 1-15 wt.% of a resin having polar groups over Taniguchi et al, but Taniguchi et al also teach such resin, maleic anhydride-modified polypropylene at col. 7, lines 29-39.

It would have been obvious to one skilled in the art at the time of invention to utilize 1-15 wt.% of maleic anhydride-modified polypropylene in the composition of Taniguchi et al since Taniguchi et al teach employing such resin absent showing otherwise.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as obvious over Taniguchi et al (US 5,567,759) and Moteki et al (US 4,409,345).

Moteki et al teach employing the instant amount of a maleic anhydride-modified polypropylene in propylene-ethylene block copolymer compositions in tables 1-11 wherein 1, 3, 5 and 10 wt.% are taught.

It would have been obvious to one skilled in the art at the time of invention to utilize 1-10 wt.% of maleic anhydride-modified polypropylene in the composition of Taniguchi et al with teaching of Moteki et al since Taniguchi et al teach employing such resin absent showing otherwise.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Shinonaga et al (US 5,573,856).

Shinonaga et al teach a polypropylene composition in abstract and examples, especially example 1 and tables 9 and 11. Block copolymer (col. 3, lines 25-39), ethylene- propylene copolymer and polyolefinpolyol (col. 4, lines 6-50) are also taught. Said ethylene- propylene copolymer encompasses the instant ethylene-propylene copolymer (b) and (c) absent a particular  $\alpha$ -olefin. Thus, the instant invention lacks novelty.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (703) 308-2389. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Tae H Yoon  
Primary Examiner  
Art Unit 1714

THY/December 1, 2003